

WHAT IS CLAIMED IS:

1. An inkjet printer comprising:

a head including an ink ejection surface that ejects ink;

5 a cap capable of moving to come into contact with the ink ejection surface of the head, the cap includes an ink outflow channel where the ink ejected from the head flows out to external due to weight of the ink;

a primary recovery portion that allows the ink flowing  
10 out from the cap through the ink outflow channel to flow into the primary recovery portion to recover the ink; and

a secondary recovery portion including an ink absorber, which absorbs the ink due to a capillary phenomenon from the primary recovery portion to recover the ink.

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2. The inkjet printer according to claim 1, wherein:

the primary recovery portion moves together with the cap;

and

the primary recovery portion comes into contact with the  
20 secondary recovery portion and allows the secondary recovery portion to absorb the ink from the primary recovery portion when the primary recovery portion reaches a rest position where the primary recovery portion stops moving.

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3. The inkjet printer according to claim 2, wherein:

the primary recovery portion moves forward and backward between two positions;

the rest position is located in each of both ends in a moving direction of the primary recovery portion; and

5 the primary recovery portion comes into contact with the secondary recovery portion when the primary recovery portion reaches the rest position in each of both ends.

4. The inkjet printer according to claim 2, further comprising:

10 a pressing mechanism that displaces a part of the secondary recovery portion interlocking with the motion of the primary recovery portion to press the secondary recovery portion onto the primary recovery portion when the primary recovery portion reaches the rest position.

5. The inkjet printer according to claim 1, wherein the primary recovery portion includes an ink absorber that absorbs the ink due to the capillary phenomenon.

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6. The inkjet printer according to claim 1, further comprising:

a valve that closes the ink outflow channel when the cap is in close contact with the head and opens the ink outflow channel when the cap is at a distance from the head.

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7. The inkjet printer according to claim 1, further comprising:

an ink reservoir disposed in the middle of the ink outflow  
5 channel, the ink reservoir that reserves a part of the ink flowing  
into the ink reservoir from an upstream and allows the rest  
of the ink to overflow to a downstream, to make the reserved  
ink block gas flowing back through the ink outflow channel.

10 8. The inkjet printer according to claim 1, further comprising:

an ink reservoir disposed at an outlet of the ink outflow  
channel, the ink reservoir that reserves a part of the ink flowing  
into the ink reservoir from an upstream and allows the rest  
15 of the ink to overflow to a downstream, to make the reserved  
ink block gas flowing back through the ink outflow channel.

9. The ink jet printer according to claim 1, wherein:  
the cap moves between a first position and a second  
20 position;

when the cap reaches the first position, the cap is in  
close contact with the head.

10. An inkjet printer comprising:  
25 a line-type head fixed to a main body at a position where

the head faces a transport path of a paper-like recording medium,  
the head including an ink ejection surface that ejects ink;

a movable body movable forward and backward between a  
first position where the movable body is present in front of  
5 the ink ejection surface of the head in an ink ejection direction  
and a second position where the movable body is out of a front  
of the ink ejection surface of the head in the ink ejection  
direction;

a cap mounted on the movable body, that is capable of  
10 moving to come into contact with the ink ejection surface of  
the head and includes an ink out flow channel where the ink  
ejected from the head flows out to external due to weight of  
the ink;

a primary recovery portion mounted on the movable body,  
15 the primary recovery portion that allows the ink flowing out  
from the cap through the ink outflow channel to flow into the  
primary recovery portion to recover the ink; and

a secondary recovery portion fixed to the main body and  
including an ink absorber, which absorbs the ink due to a  
20 capillary phenomenon from the primary recovery portion to  
recover the ink, wherein:

the primary recovery portion comes into contact with the  
secondary recovery portion to allow the secondary recovery  
portion to absorb the ink from the primary recovery portion  
25 when the movable body reaches one of the first and second

positions.

11. A cap unit for a maintenance unit of an ink jet printer, the cap unit comprising:

5 a cap member including a channel communicating one side of the cap member and another side of the cap member; and  
a valve that contacts an end portion of the channel to close the channel.

10 12. The cap unit according to claim 11, further comprising:

an urging member that urges the valve when the valve closes the channel.

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